

# TEST REPORT

**FCC ID: 2ACOE-WG203**

**Product: WIFI module**

**Model No.: WG203**

**Additional Model No.: N/A**

**Trade Mark: SKYLAB**

**Report No.: TCT160830E023**

**Issued Date: Oct. 11, 2016**

Issued for:

**Skylab M&C Technology Co.,Ltd**

**9th Floor, zhongguang Building, Yayuan Road, Bantian, Shenzhen**

Issued By:

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**TABLE OF CONTENTS**

<b>1. Test Certification.....</b>	<b>3</b>
<b>2. Test Result Summary.....</b>	<b>4</b>
<b>3. EUT Description.....</b>	<b>5</b>
<b>4. Genera Information.....</b>	<b>9</b>
4.1. Test environment and mode .....	9
4.2. Description of Support Units .....	10
<b>5. Facilities and Accreditations .....</b>	<b>11</b>
5.1. Facilities .....	11
5.2. Location .....	11
5.3. Measurement Uncertainty .....	11
<b>6. Test Results and Measurement Data .....</b>	<b>12</b>
6.1. Antenna requirement .....	12
6.2. Conducted Emission.....	13
6.3. Maximum Conducted Output Power .....	17
6.4. 6dB Emission Bandwidth .....	20
6.5. 26dB Bandwidth and 99% Occupied Bandwidth .....	28
6.6. Power Spectral Density .....	36
6.7. Band edge .....	44
6.8. Spurious Emission.....	51
6.9. Frequency Stability Measurement.....	62

**Appendix A: Photographs of Test Setup**

**Appendix B: Photographs of EUT**

## 1. Test Certification

<b>Product:</b>	WIFI module
<b>Model No.:</b>	WG203
<b>Additional Model No.:</b>	N/A
<b>Applicant:</b>	Skylab M&C Technology Co.,Ltd
<b>Address:</b>	9th Floor, zhongguang Building, Yayuan Road, Bantian, Shenzhen
<b>Manufacturer:</b>	Skylab M&C Technology Co.,Ltd
<b>Address:</b>	9th Floor, zhongguang Building, Yayuan Road, Bantian, Shenzhen
<b>Date of Test:</b>	Aug. 30 – Oct. 10, 2016
<b>Applicable Standards:</b>	FCC CFR Title 47 Part 15 Subpart E Section 15.407 KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v01r03

*The above equipment has been tested by Shenzhen Tongce Testing Lab. and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.*

**Tested By:**

*Garen*

Garen

**Date:**

Oct. 10, 2016

**Reviewed By:**

*Joe Zhou*

Joe Zhou

**Date:**

Oct. 11, 2016

**Approved By:**

*Tomsin*

Tomsin

**Date:**

Oct. 11, 2016

## 2. Test Result Summary

Requirement	CFR 47 Section	Result
Antenna requirement	§15.203	PASS
AC Power Line Conducted Emission	§15.207	PASS
Maximum Conducted Output Power	§15.407(a) §2.1046	PASS
6dB Emission Bandwidth	§15.407(a) §2.1049	PASS
26dB Emission Bandwidth & 99% Occupied Bandwidth	§15.407(a) §2.1049	PASS
Power Spectral Density	§15.407(a)	PASS
Restricted Bands around fundamental frequency	§15.407(a)	PASS
Radiated Emission	§15.407(a) §2.1053	PASS
Frequency Stability	§15.407(g) §2.1055	PASS

**Note:**

1. PASS: Test item meets the requirement.
2. Fail: Test item does not meet the requirement.
3. N/A: Test case does not apply to the test object.
4. The test result judgment is decided by the limit of test standard.

### 3. EUT Description

<b>Product Name:</b>	WIFI module
<b>Model :</b>	WG203
<b>Additional Model:</b>	N/A
<b>Trade Mark:</b>	<b>SKYLAB</b>
<b>Operation Frequency:</b>	Band IV: 5745MHz~5825MHz
<b>Channel Bandwidth:</b>	802.11a :20MHz 802.11n :20MHz, 40MHz
<b>Modulation Technology:</b>	Orthogonal Frequency Division Multiplexing(OFDM)
<b>Modulation Type</b>	256QAM, 64QAM, 16QAM, BPSK, QPSK
<b>Antenna Type:</b>	R-SMA antenna
<b>Antenna Gain:</b>	Band IV: 5745MHz~5825MHz: 1dBi
<b>Power Supply:</b>	DC 5V from Micro USB port.

Band IV (5725 - 5850 MHz ) Power level setup in software			
Mode	Channel	Frequency	Soft set
11n (HT20)	CH149	5745	13
11n (HT20)	CH157	5785	19
11n (HT20)	CH165	5825	13
11n (HT40)	CH151	5755	13
11n (HT40)	CH159	5795	13

*Note: The Soft set value is the internal setting required to meet the requirements and does not necessarily mean the 'dBm' value*

Operation Frequency each of channel

20MHz		40MHz	
Channel	Frequency	Channel	Frequency
36	5180	38	5190
40	5200	46	5230
44	5220	54	5270
48	5240	62	5310
52	5260	102	5510
56	5280	110	5550
60	5300	134	5670
64	5320	151	5755
100	5500	159	5790
104	5520		
108	5540		
112	5560		
116	5580		
132	5660		
136	5680		
140	5700		
149	5745		
153	5765		
157	5785		
161	5805		
165	5825		

**Note:**

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

**For 802.11a/n(HT20)**

Band IV (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)
149	Low	5745
157	Mid	5785
165	High	5825

**For 802.11n (HT40)**

Band IV (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)
151	Low	5755
159	High	5795



## 4. Genera Information

### 4.1. Test environment and mode

Operating Environment:	
Temperature:	25.0 °C
Humidity:	56 % RH
Atmospheric Pressure:	1010 mbar
Test Mode:	
Engineering mode:	Keep the EUT in continuous transmitting by select channel and modulations(The value of duty cycle is 100%)

The sample was placed 0.8m/1.5m for blow/above 1GHz above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

**Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.**

Mode	Data rate
802.11a	6Mbps
802.11n(HT20)	6.5 Mbps
802.11n(HT40)	13.5 Mbps

Final Test Mode:	
Operation mode:	Keep the EUT in continuous transmitting with modulation

## 4.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
Notebook	G485	/	/	Lenovo

**Note:**

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
3. For conducted measurements (Output Power, Emission Bandwidth, Power Spectral Density, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.

## 5. Facilities and Accreditations

### 5.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

- FCC - Registration No.: 572331

Shenzhen Tongce Testing Lab

The 3m Semi-anechoic chamber has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A-1

The 3m Semi-anechoic chamber of Shenzhen TCT Testing Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing

- CNAS - Registration No.: CNAS L6165

Shenzhen TCT Testing Technology Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6165.

### 5.2. Location

Shenzhen Tongce Testing Lab

Address: 1F, Leinuo Watch Building, Fuyong Town, Baoan Dist, Shenzhen, China

Tel: 86-755-36638142

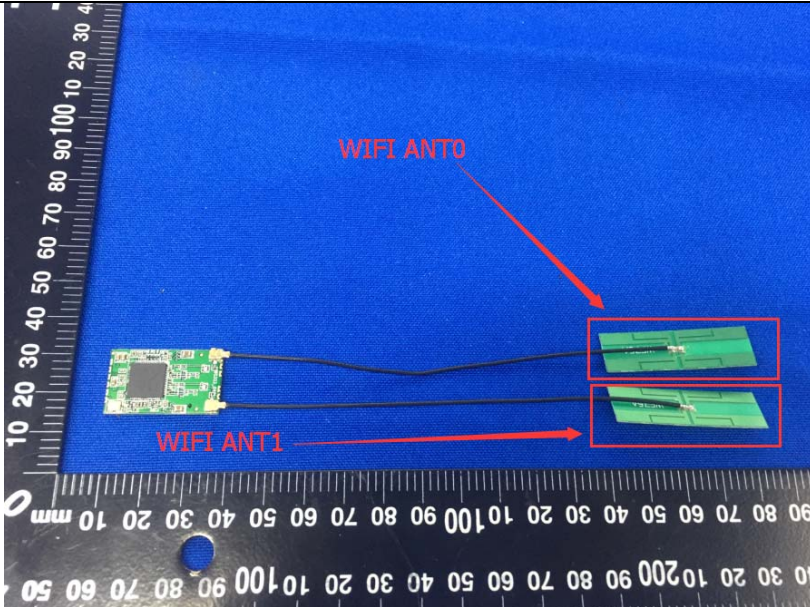
### 5.3. Measurement Uncertainty

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95 %.

No.	Item	MU
1	Conducted Emission	$\pm 2.56\text{dB}$
2	RF power, conducted	$\pm 0.12\text{dB}$
3	Spurious emissions, conducted	$\pm 0.11\text{dB}$
4	All emissions, radiated(<1G)	$\pm 3.92\text{dB}$
5	All emissions, radiated(>1G)	$\pm 4.28\text{dB}$
6	Temperature	$\pm 0.1^\circ\text{C}$
7	Humidity	$\pm 1.0\%$

## 6. Test Results and Measurement Data

### 6.1. Antenna requirement

<b>Standard requirement:</b>	FCC Part15 C Section 15.203 /247(c)
<p>15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</p>	
<b>E.U.T Antenna:</b>	
<p>The EUT two antennas are PIFA antennas which permanently attached,, and the best case gain of the antennas all are 1dBi.</p>	
 <p>The photograph shows a small green printed circuit board (PCB) component with two antennas. The antennas are labeled 'WIFI ANT0' and 'WIFI ANT1' with red arrows pointing to them. The antennas are PIFA (Planar Inverted-F Antenna) type. They are placed on a blue surface, and a ruler is visible in the background for scale. The ruler shows measurements in millimeters and centimeters.</p>	

## 6.2. Conducted Emission

### 6.2.1. Test Specification

<b>Test Requirement:</b>	FCC Part15 C Section 15.207														
<b>Test Method:</b>	ANSI C63.10:2013														
<b>Frequency Range:</b>	150 kHz to 30 MHz														
<b>Receiver setup:</b>	RBW=9 kHz, VBW=30 kHz, Sweep time=auto														
<b>Limits:</b>	<table border="1"> <thead> <tr> <th rowspan="2">Frequency range (MHz)</th> <th colspan="2">Limit (dBuV)</th> </tr> <tr> <th>Quasi-peak</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>0.15-0.5</td> <td>66 to 56*</td> <td>56 to 46*</td> </tr> <tr> <td>0.5-5</td> <td>56</td> <td>46</td> </tr> <tr> <td>5-30</td> <td>60</td> <td>50</td> </tr> </tbody> </table>	Frequency range (MHz)	Limit (dBuV)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dBuV)														
	Quasi-peak	Average													
0.15-0.5	66 to 56*	56 to 46*													
0.5-5	56	46													
5-30	60	50													
<b>Test Setup:</b>	<p><i>Remark</i> E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m</p>														
<b>Test Mode:</b>	Tx Mode														
<b>Test Procedure:</b>	<ol style="list-style-type: none"> <li>The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment.</li> <li>The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).</li> <li>Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement.</li> </ol>														
<b>Test Result:</b>	PASS														

**6.2.2. Test Instruments**

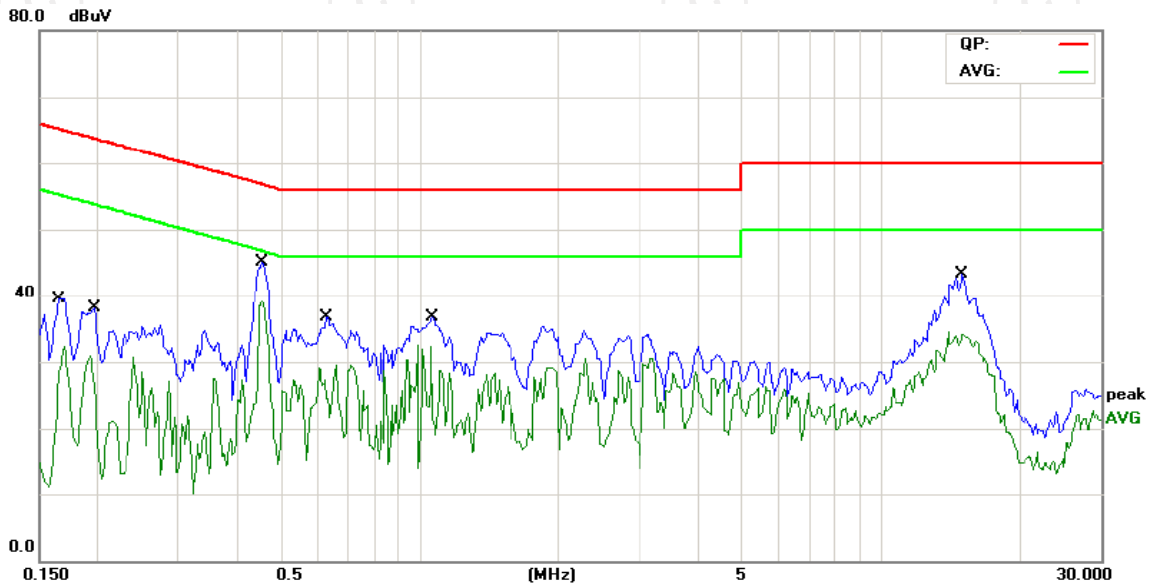
Conducted Emission Shielding Room Test Site (843)				
Equipment	Manufacturer	Model	Serial Number	Calibration Due
EMI Test Receiver	R&S	ESCS30	100139	Aug. 11, 2017
LISN	Schwarzbeck	NSLK 8126	8126453	Aug. 16, 2017
Coax cable	TCT	CE-05	N/A	Aug. 11, 2017
EMI Test Software	Shurple Technology	EZ-EMC	N/A	N/A

**Note:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

6.2.3. Test data

Please refer to following diagram for individual

Conducted Emission on Line Terminal of the power line (150 kHz to 30MHz)



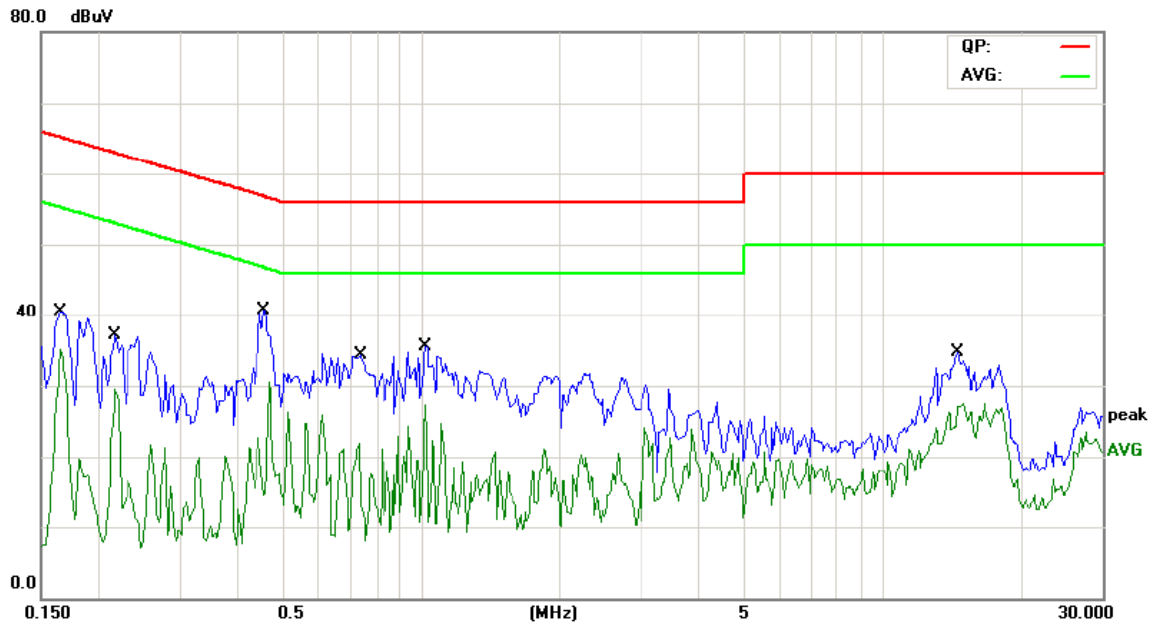
Site Chamber #2 Phase: **L1** Temperature: 25 (C)  
Limit: FCC PART15 Conduction(QP) Power: AC 120V/60Hz Humidity: 56 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1655	25.57	11.49	37.06	65.18	-28.12	QP	
2		0.1655	17.45	11.49	28.94	55.18	-26.24	AVG	
3		0.1969	21.07	11.46	32.53	63.74	-31.21	QP	
4		0.1969	13.10	11.46	24.56	53.74	-29.18	AVG	
5		0.4586	29.39	11.32	40.71	56.72	-16.01	QP	
6	*	0.4586	26.93	11.32	38.25	46.72	-8.47	AVG	
7		0.6305	22.67	11.24	33.91	56.00	-22.09	QP	
8		0.6305	17.59	11.24	28.83	46.00	-17.17	AVG	
9		1.0680	21.07	11.21	32.28	56.00	-23.72	QP	
10		1.0680	12.07	11.21	23.28	46.00	-22.72	AVG	
11		14.9922	24.86	11.64	36.50	60.00	-23.50	QP	
12		14.9922	13.05	11.64	24.69	50.00	-25.31	AVG	

**Note:**

- Freq. = Emission frequency in MHz
- Reading level (dBuV) = Receiver reading
- Corr. Factor (dB) = Antenna factor + Cable loss
- Measurement (dBuV) = Reading level (dBuV) + Corr. Factor (dB)
- Limit (dBuV) = Limit stated in standard
- Margin (dB) = Measurement (dBuV) – Limits (dBuV)
- Q.P. =Quasi-Peak
- AVG =average
- \* is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz

**Conducted Emission on Neutral Terminal of the power line (150 kHz to 30MHz)**



Site Chamber #2 Phase: **N** Temperature: 25 (C)  
Limit: FCC PART15 Conduction(QP) Power: AC 120V/60Hz Humidity: 56 %

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV	Limit dBuV	Over dB	Detector	Comment
1	0.1655	27.18	11.51	38.69	65.18	-26.49	QP	
2	0.1655	13.91	11.51	25.42	55.18	-29.76	AVG	
3	0.2164	22.62	11.47	34.09	62.95	-28.86	QP	
4	0.2164	9.17	11.47	20.64	52.95	-32.31	AVG	
5 *	0.4586	25.81	11.33	37.14	56.72	-19.58	QP	
6	0.4586	14.66	11.33	25.99	46.72	-20.73	AVG	
7	0.7359	13.29	11.21	24.50	56.00	-31.50	QP	
8	0.7359	1.20	11.21	12.41	46.00	-33.59	AVG	
9	1.0211	13.47	11.19	24.66	56.00	-31.34	QP	
10	1.0211	0.19	11.19	11.38	46.00	-34.62	AVG	
11	14.5391	15.17	11.63	26.80	60.00	-33.20	QP	
12	14.5391	5.67	11.63	17.30	50.00	-32.70	AVG	

**Note:**

- Freq. = Emission frequency in MHz
- Reading level (dBuV) = Receiver reading
- Corr. Factor (dB) = attenuator factor + Cable loss
- Measurement (dBuV) = Reading level (dBuV) + Corr. Factor (dB)
- Limit (dBuV) = Limit stated in standard
- Margin (dB) = Measurement (dBuV) – Limits (dBuV)
- Q.P. =Quasi-Peak
- AVG =average
- \* is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz.



### 6.3. Maximum Conducted Output Power

#### 6.3.1. Test Specification

<b>Test Requirement:</b>	FCC Part15 E Section 15.407(a)& Part 2 J Section 2.1046	
<b>Test Method:</b>	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v01r03 Section E	
<b>Limit:</b>	Frequency Band (MHz)	Limit
	5150-5250	1W for indoor access point
	5250-5350	250 mW or 11 dBm + 10log B, whichever is less.
	5470-5725	250 mW or 11 dBm + 10log B, whichever is less.
	5725-5850	1 W
	Note: Where "B" is the 26 dB emissions bandwidth in MHz.	
	RSS-247, 6.2	
	Frequency Band (MHz)	Limit
	5150-5250	N/A
	5250-5350	250 mW or 11 dBm + 10log B, whichever is less.
	5470-5725	250 mW or 11 dBm + 10log B, whichever is less.
	5725-5850	1 W
	Note: Where "B" is the 99% emissions bandwidth in MHz.	
	The maximum e.i.r.p. shall not exceed:	
	Frequency Band (MHz)	Limit
5150-5250	200 mW or 10 dBm + 10log B, whichever is less.	
5250-5350	1W or 17 dBm + 10log B, whichever is less.	
5470-5725	1W or 17 dBm + 10log B, whichever is less.	
5725-5850	N/A	
Note: Where "B" is the 99% emissions bandwidth in MHz.		



**6.3.3. Test Data**


Configuration Band IV (5725 - 5850 MHz ) / Antenna 0+Antenna 1						
Mode	Test channel	Maximum Conducted (Average) Output Power (dBm)			FCC Limit (dBm)	Result
		Ant0	Ant1	Total		
11a	CH149	15.68	15.81	18.76	30	PASS
11a	CH157	14.92	15.36	18.16	30	PASS
11a	CH161	15.38	15.23	18.32	30	PASS
11n (HT20)	CH149	15.05	14.24	17.67	30	PASS
11n (HT20)	CH157	14.67	14.73	17.71	30	PASS
11n (HT20)	CH161	14.72	14.53	17.64	30	PASS
11n (HT40)	CH151	16.69	16.21	19.47	30	PASS
11n (HT40)	CH159	16.36	16.05	19.22	30	PASS

**Note 1:**  $G_{ANT}=1dBi$ ,  $Array\ Gain=10\log(N_{ANT}/N_{SS})=3.01dBi$ ,  $Directional\ Gain=G_{ANT} + Array\ Gain=4.01dBi$ ,  $4.01dBi < 6dBi$  so  $limit=30dBm/MHz$

**Note2:** The limit is 250 mW or 11 dBm + 10log B, whichever is less. In IC Standard, Where “B” is the 99% emissions bandwidth in MHz. In FCC Standard, Where “B” is the 26dB emissions bandwidth in MHz. Please refer to section 6.4.

## 6.4. 6dB Emission Bandwidth

### 6.4.1. Test Specification

<b>Test Requirement:</b>	FCC CFR47 Part 15 Section 15.407(e)& Part 2 J Section 2.1049
<b>Test Method:</b>	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v01r03 Section C
<b>Limit:</b>	>500kHz
<b>Test Setup:</b>	 <p style="text-align: center;">Spectrum Analyzer                      EUT</p>
<b>Test Mode:</b>	Transmitting mode with modulation
<b>Test Procedure:</b>	<ol style="list-style-type: none"> <li>1. KDB789033 D02 General UNII Test Procedures New Rules v01r03 Section C</li> <li>2. Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>3. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6dB bandwidth must be greater than 500 kHz.</li> <li>4. Measure and record the results in the test report.</li> </ol>
<b>Test Result:</b>	PASS

### 6.4.2. Test Instruments

RF Test Room				
Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100060	Aug. 12, 2017
RF cable	TCT	RE-06	N/A	Aug. 12, 2017
Antenna Connector	TCT	RFC-01	N/A	Aug. 12, 2017

**Note:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

**6.4.3. Test data**

**ANT 0**

Band IV (5725 - 5850 MHz)					
Mode	Test channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
11a	CH149	5745	16.36	0.5	PASS
11a	CH157	5785	16.34	0.5	PASS
11a	CH161	5825	16.40	0.5	PASS
11n(HT20)	CH149	5745	17.09	0.5	PASS
11n(HT20)	CH157	5785	17.11	0.5	PASS
11n(HT20)	CH161	5825	16.97	0.5	PASS
11n(HT40)	CH151	5755	35.25	0.5	PASS
11n(HT40)	CH159	5795	35.58	0.5	PASS

**ANT 1**

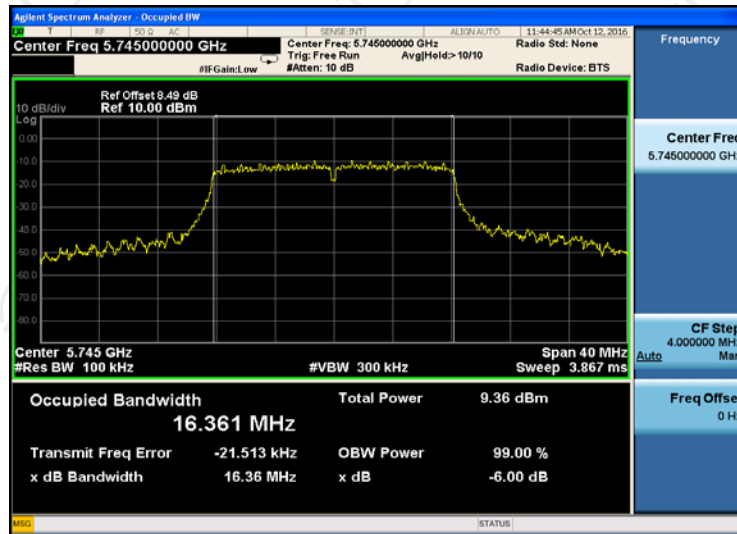
Band IV (5725 - 5850 MHz)					
Mode	Test channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
11a	CH149	5745	16.36	0.5	PASS
11a	CH157	5785	16.35	0.5	PASS
11a	CH161	5825	16.33	0.5	PASS
11n(HT20)	CH149	5745	16.70	0.5	PASS
11n(HT20)	CH157	5785	16.95	0.5	PASS
11n(HT20)	CH161	5825	16.70	0.5	PASS
11n(HT40)	CH151	5755	35.25	0.5	PASS
11n(HT40)	CH159	5795	35.75	0.5	PASS

Test plots as follows:

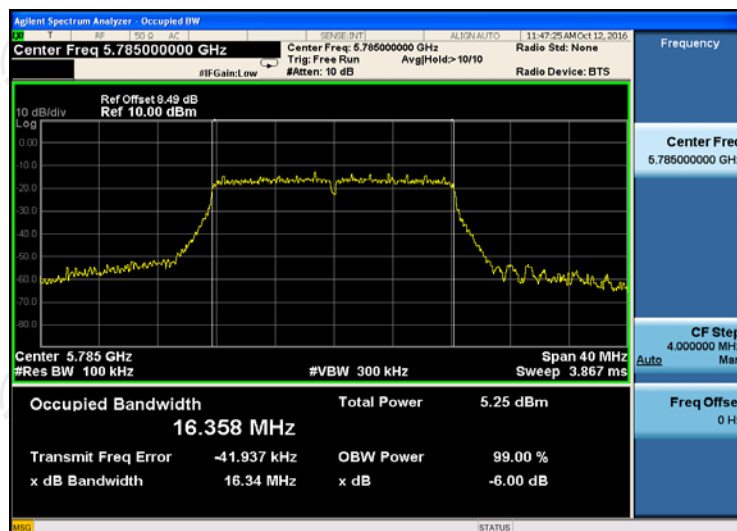
ANT 0  
Band IV (5725 – 5850 MHz)

11a

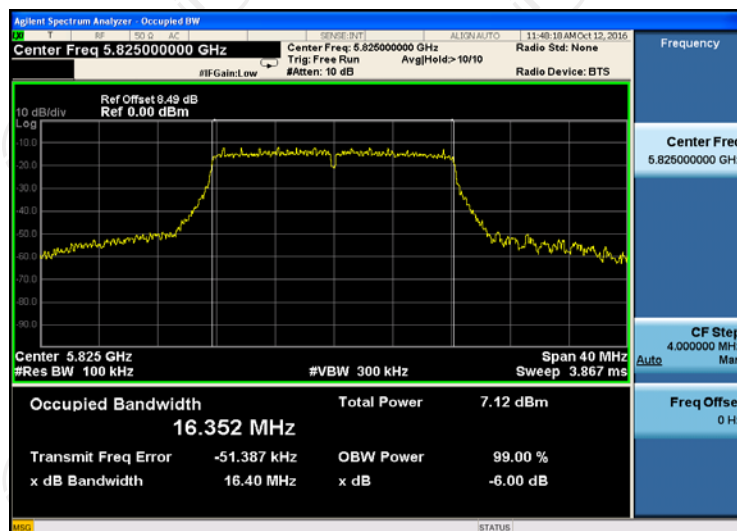
CH149



CH157

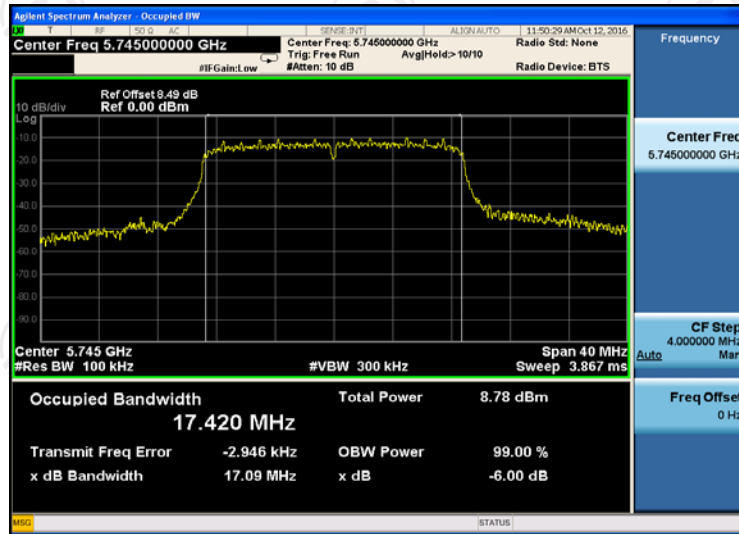


CH161

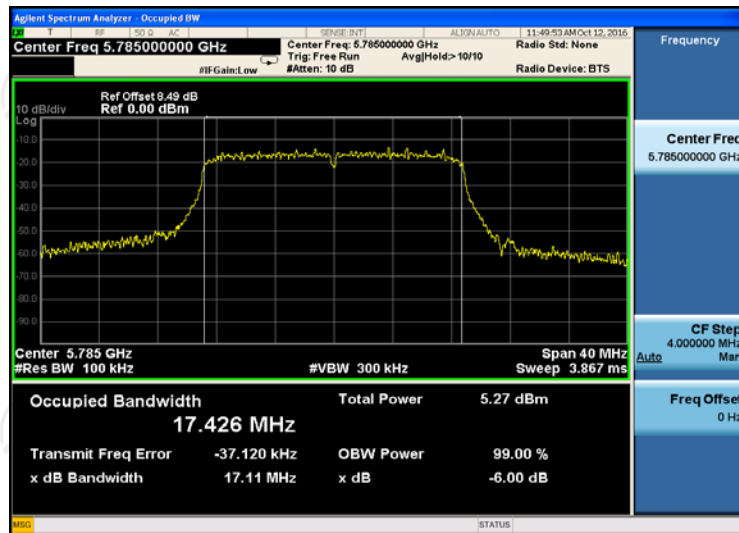


11n(HT20)

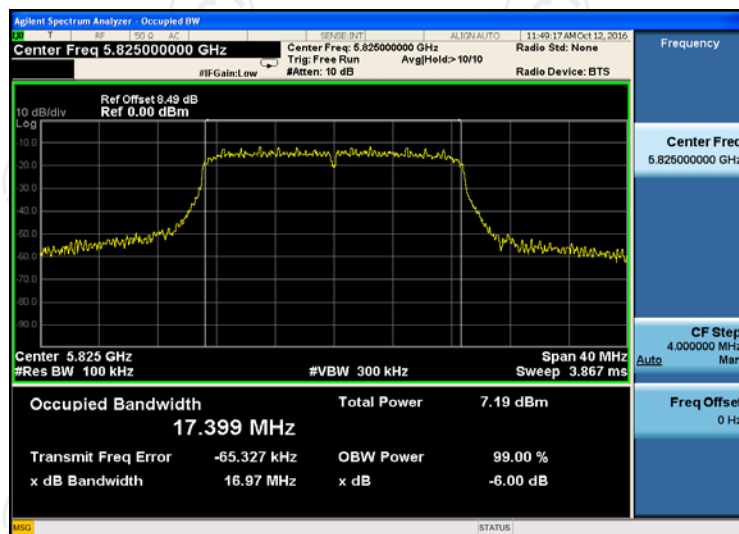
CH149



CH157

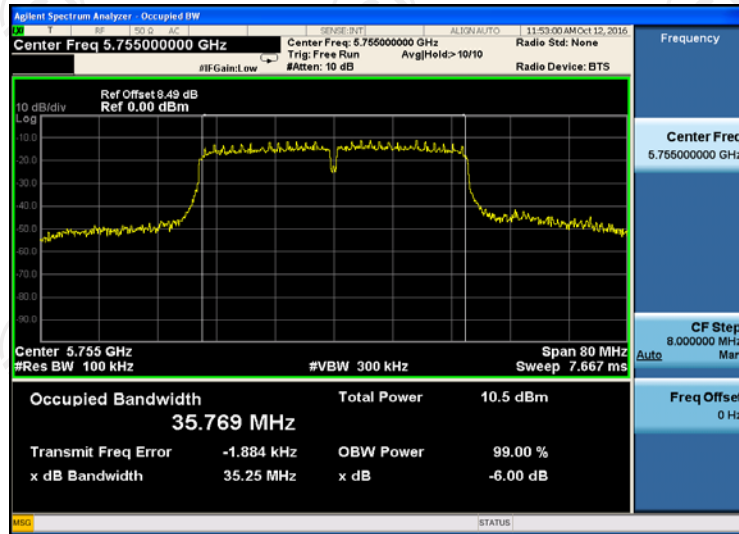


CH161

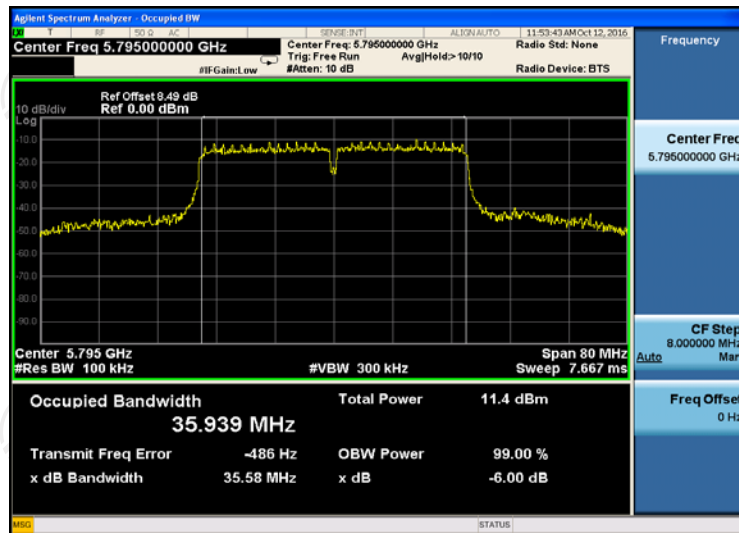


11n(HT40)

CH151



CH159

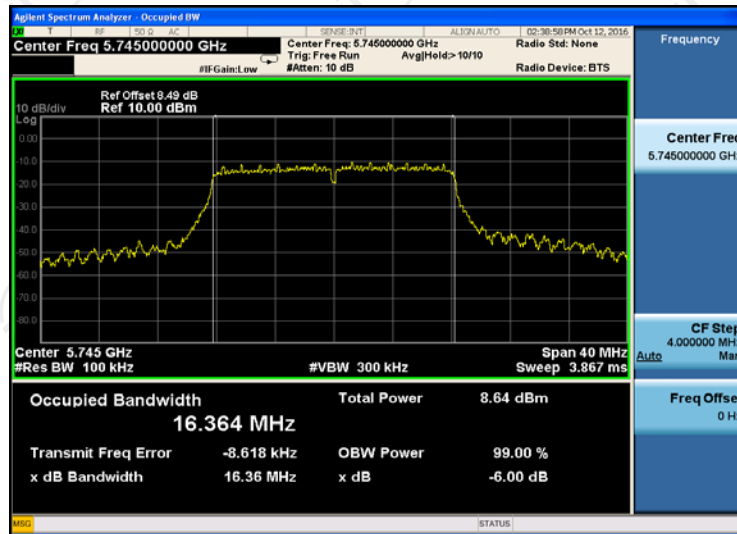




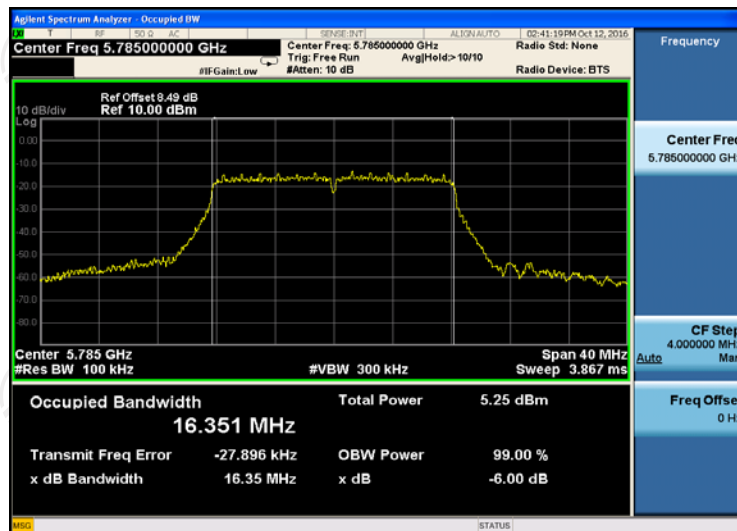
ANT 1  
Band IV (5725 – 5850 MHz)

11a

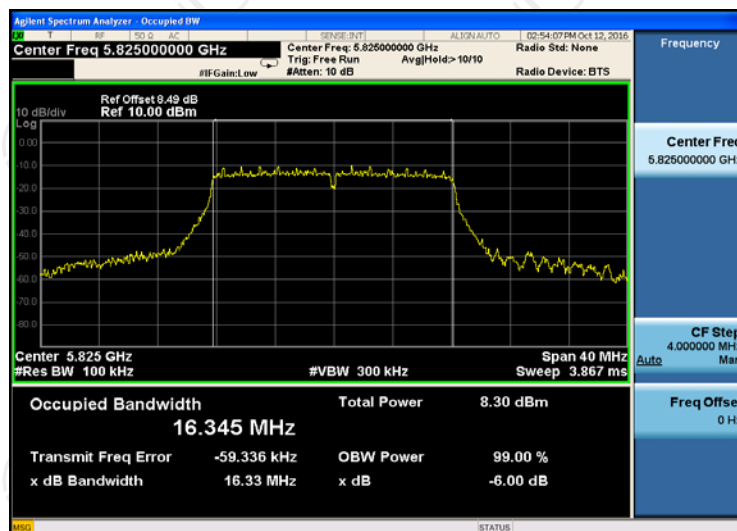
CH149



CH157

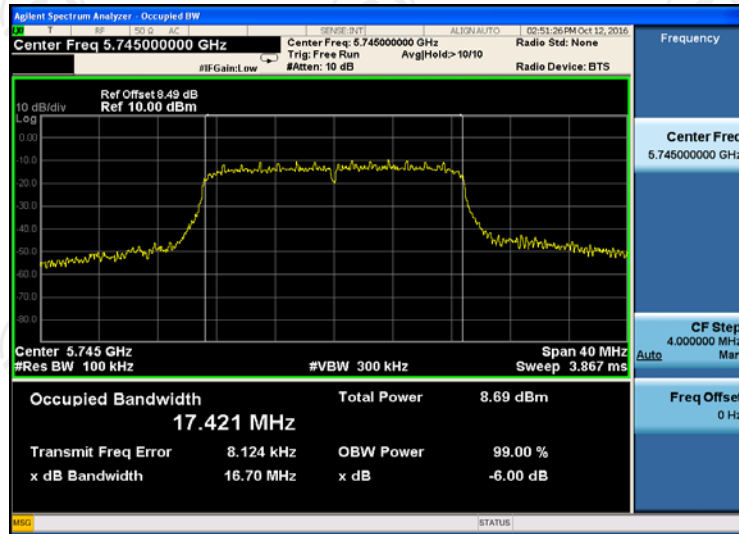


CH161

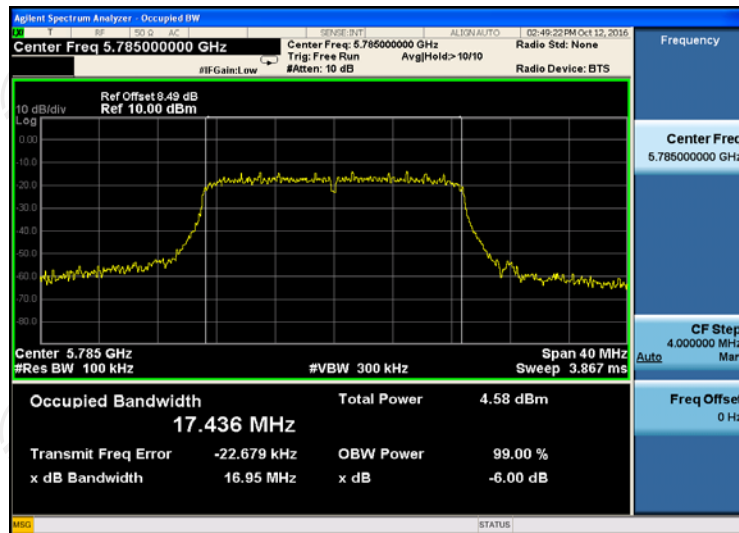


11n(HT20)

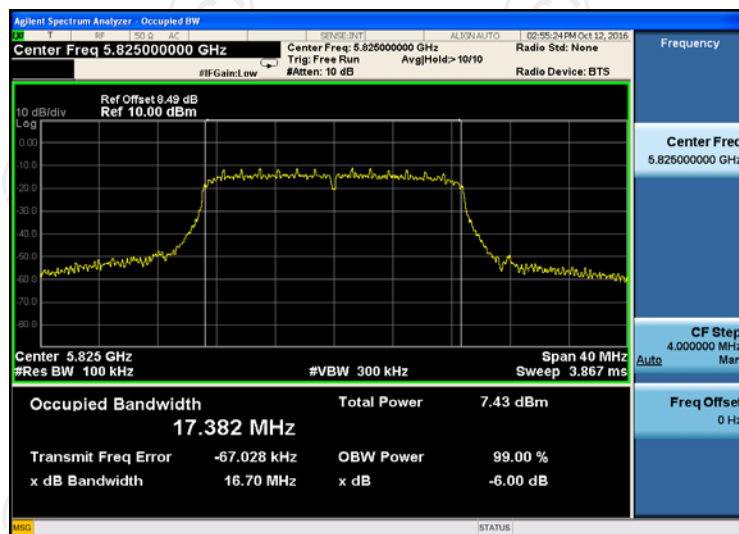
CH149



CH157

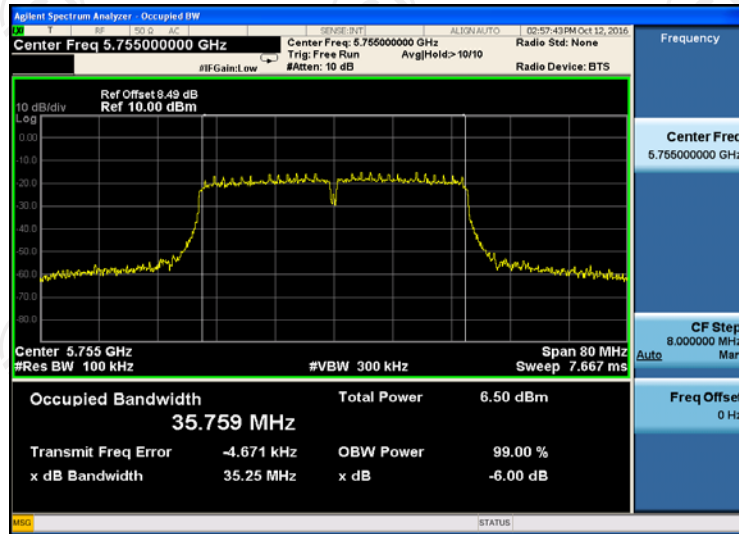


CH161

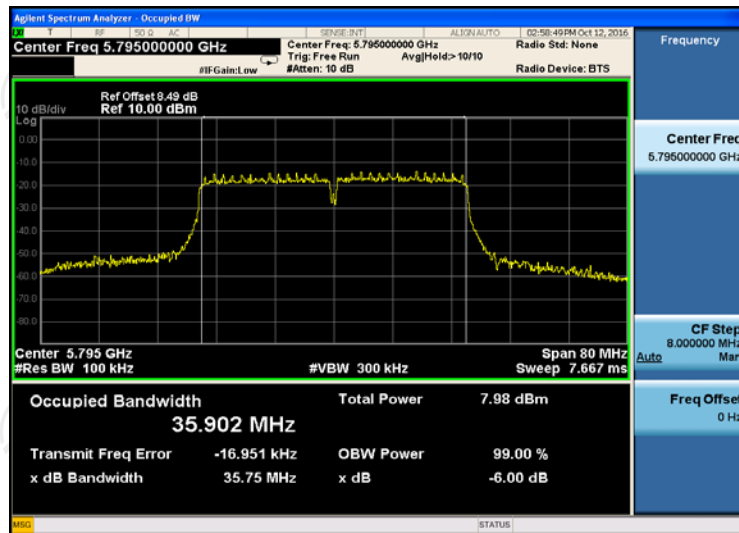


11n(HT40)

CH151




CH159



## 6.5. 26dB Bandwidth and 99% Occupied Bandwidth

### 6.5.1. Test Specification

<b>Test Requirement:</b>	47 CFR Part 15C Section 15.407 (a)& Part 2 J Section 2.1049
<b>Test Method:</b>	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v01r03 Section D
<b>Limit:</b>	No restriction limits
<b>Test Setup:</b>	 <p style="text-align: center;">Spectrum Analyzer                      EUT</p>
<b>Test Mode:</b>	Transmitting mode with modulation
<b>Test Procedure:</b>	<ol style="list-style-type: none"> <li>1. KDB789033 D02 General UNII Test Procedures New Rules v01r03 Section D</li> <li>2. Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>3. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement.</li> <li>4. Measure and record the results in the test report.</li> </ol>
<b>Test Result:</b>	PASS

### 6.5.2. Test Instruments

RF Test Room				
Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100060	Aug. 12, 2017
RF cable	TCT	RE-06	N/A	Aug. 12, 2017
Antenna Connector	TCT	RFC-01	N/A	Aug. 12, 2017

**Note:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

**6.5.3. Test data**

**ANT 0:**

**Band IV**

Mode	Test channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH149	5745	19.45	16.510
11a	CH157	5785	19.27	16.530
11a	CH161	5825	19.54	16.573
11n(HT20)	CH149	5745	19.97	17.474
11n(HT20)	CH157	5785	20.01	17.457
11n(HT20)	CH161	5825	19.93	17.439
11n(HT40)	CH151	5755	39.62	35.877
11n(HT40)	CH159	5795	39.81	36.006

**ANT 1:**

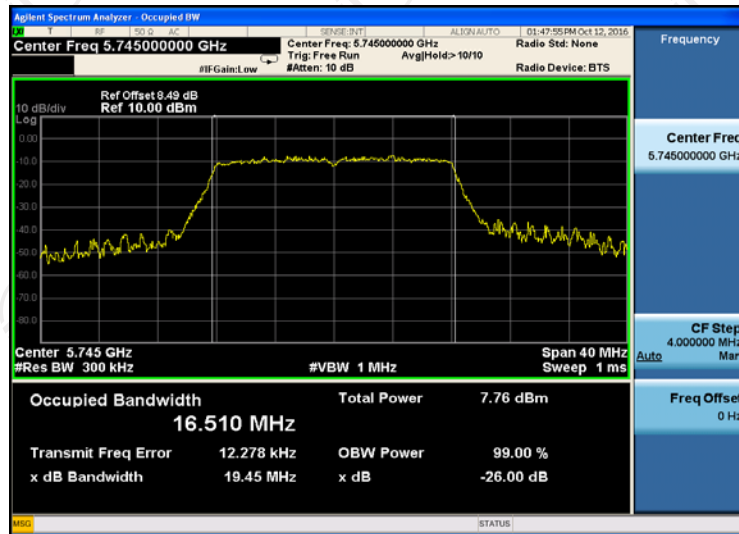
**Band IV**

Mode	Test channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH149	5745	19.42	16.546
11a	CH157	5785	19.54	16.584
11a	CH161	5825	19.38	16.574
11n(HT20)	CH149	5745	20.01	17.444
11n(HT20)	CH157	5785	20.04	17.453
11n(HT20)	CH161	5825	20.05	17.423
11n(HT40)	CH151	5755	39.72	35.865
11n(HT40)	CH159	5795	39.63	35.958

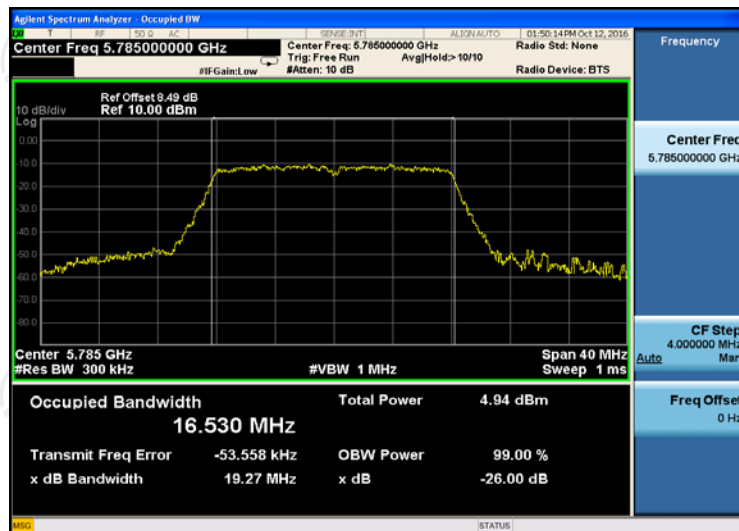
Test plots as follows:

ANT 0  
Band IV (5725 – 5850 MHz)  
11a

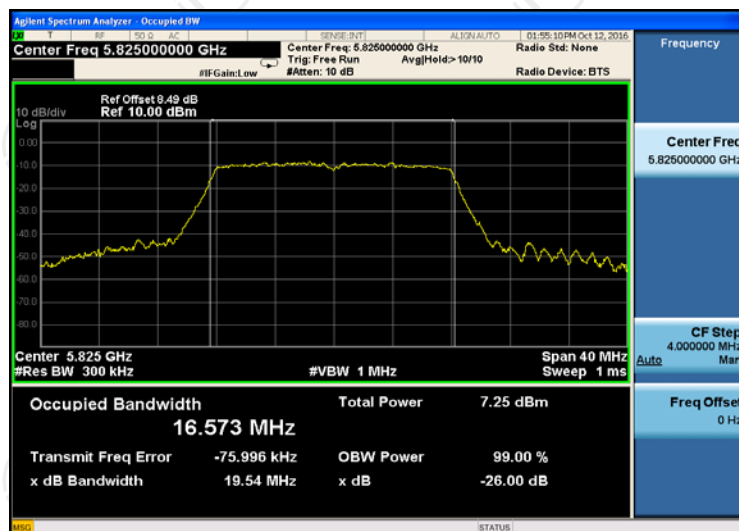
CH149



CH157

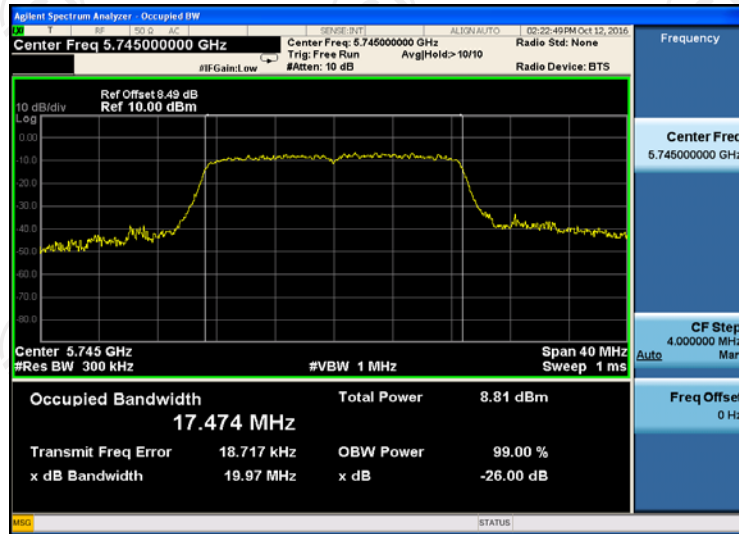


CH161

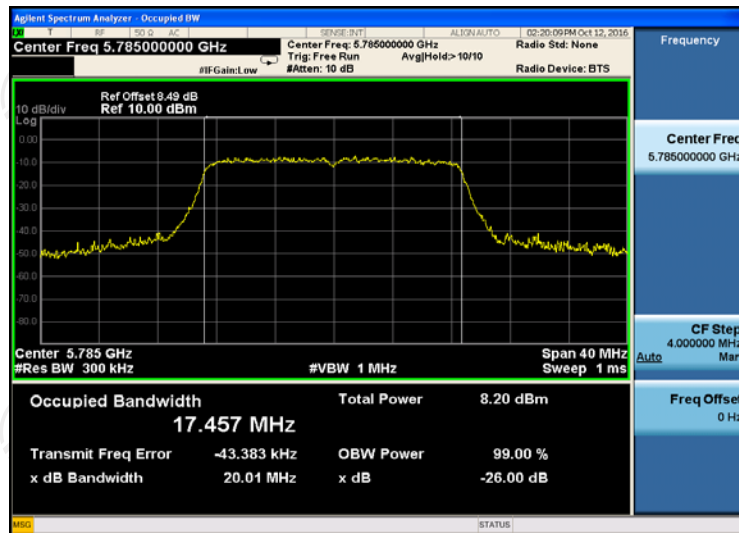


11n(HT20)

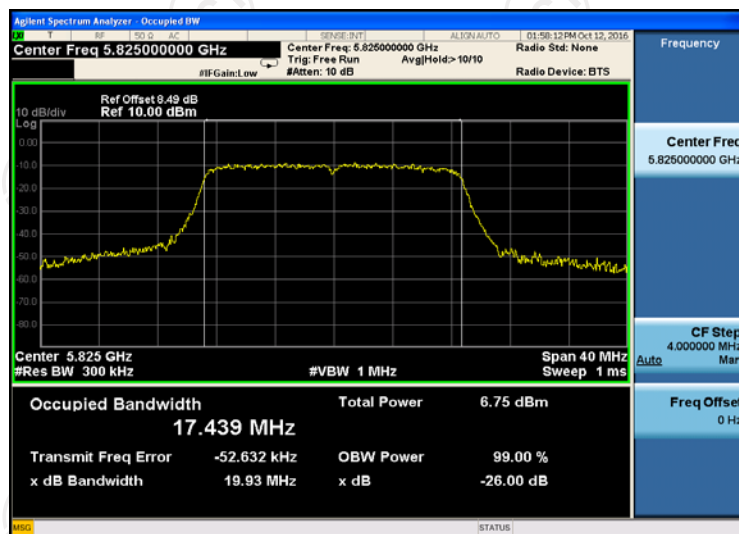
CH149



CH157

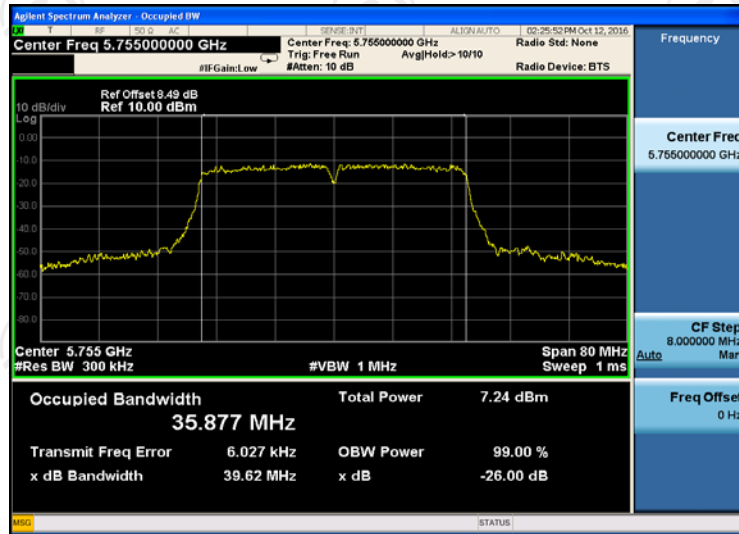


CH161



11n(HT40)

CH151



CH159

